CrossTalk

Issue 59:11 59 Years Of Service To Our Community November 2018

2018 Club Officers

President :	**Bruce Canino, KD2LBU**
Vice President :	**Jim Clark, KA2OSV**
Treasurer :	**Al Arrison, KB2AYU**
Recording Secretary :	**Jennifer Robinson, KD2EYR**
Corresponding Secretary :	**Ron Block, NR2B**

Trustees - 4 year term

Bob Demola, KD2GFL	***(2015-2018)***
Mark Gottlieb, WA2DIY	***(2016-2019)***
Bob Fields, KC6AOH	***(2017-2020)***
Tony Starr, WA2FZB	***(2018-2021)***

Board of Directors - 3 year term

Jeffrey Garth, WB2ZBN	***(2016-2018)***	**John Zaruba, K2ZA**	***(2017-2019)***
Chuck Lanard, KD2EIB	***(2016-2018)***	**Chuck Colabrese, WA2TML**	***(2018-2020)***
Bob Durham, W2RAD	***(2018)***	**Bill Price, NJ2S**	***(2018-2020)***

This Month's Calendar

General Membership Meeting
Wednesday, November 7, 2018 @ 1930 Hours
Pfeiffer Community Center

VE License Testing Session
Thursday, November 8, 2018 @ 1900 Hours
Franklin Township Public Library

Tech Saturday Forum
Saturday, November 10, 2018 @ 0900 Hours
W2MMD Clubhouse

10 Meter Swap Meet
Saturday, November 10, 2018 @ 2000 Hours
Check-in on 28.465 MHz or 28.475 MHz

Board of Directors Meeting
Wednesday, November 21, 2018 @ 1900 Hours
W2MMD Clubhouse

10 Meter Ragchew Net
Every Tuesday @ 2000 Hours
Check-in on 28.465 MHz or 28.475 MHz

2 Meter Ragchew Net
Every Thursday @ 2000 Hours
Check-in on 147.180 MHz + PL 131.8 Hz

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President's Message

October started off with the nominations for Club officers for the upcoming year 2019, and there were some new people on the list. I think that this is a fine list of candidates for the upcoming year and no matter the outcome of the election, the Club will be in good hands. Of course, they can't do everything just by themselves, so they will need everyone in the Club to help.

We also had the first of many-to-come guest speakers for Tech Saturday. This time it was Randy Smith, WU2S of AREDN Inc and he was speaking on MESH Networking. The event was well attend and well received. Thanks goes out to Mark WA2DIY, who arranged this to happen. I am looking forward the upcoming guest speakers for both the General Meeting and Tech Saturday, and not just for the rest of this year, but all throughout 2019.

Speaking of 2019, it will be the Club's 60th Anniversary. We need to do something big all year long. I don't think there are many clubs in this area who can say they have stayed active for 60+ years! If **YOU** have any suggestions of what the Club can do to celebrate, please let Jeff WB2ZBN know.

The big volunteer event of September was the Bike MS-City to Shore Ride. I heard many familiar callsigns during the day and got to put some faces with callsigns later Saturday in Ocean City. The Club was well represented, and I wish I had a list of all the members who participated, but you know who you are, and I thank each and everyone.

I am writing this coming back from the Pitman/Glassboro CROP Hunger Walk. This is another event the Club has a long history of providing radio support for. While the Club has been working with this group for a long time, this is the first time I ran the radio support and I would like to thank everyone from the Club who helped me out, Herb KT2Y, Frank W2FJM, Ed N2RO, Gary WA3SVW, Jennifer KD2EYR and Earl, and Gary N2QEE and Donna N2QED.

Jim Wright N2GXJ has organized a Fall Fox Hunt! Come on out! They are fun events, especially this time of year, not too hot/not too cold. See his article on page 5.

A lot is happening this month, from turning the clocks back on November 4th, election day on the 6th, and to Thanksgiving on the 22nd. November 11, 2018 is Veterans Day and it also commemorates the 100th anniversary of the end of World War I - *"The Great War".*

Also, one last thanks goes out to Club newsletter editor, Jeff WB2ZBN, who even though I am sending this report to him late, will make his magic of the newsletter happen. Jeff seems to pull off this magic every month producing a very fine Club newsletter. Please thank him the next time you see him or talk to him on the air.

Till next month
Happy Thanksgiving!
73
Bruce
KD2LBU

November 7, 2018 General Membership Meeting

Skype Meeting With:

Gordon West, WB6NOA

HamNation co-host, Amateur Radio licensing instructor, and author of the Gordon West License Study Guides
www.gordonwestradioschool.com

Plus final submission of nominees for the 2019 Club Officer Elections

Welcome New Club Members :

James Blose, KD2QPB, who has a Technician Class license and lives in Williamstown, NJ.
Thomas Herron, an Associate member, who lives in Somerdale, NJ.
Robert Gibison, KB2YBQ, a returning member, who has a General Class license and lives in Westville, NJ.

We are glad to have you as members of the Club and hope to see you regularly at Club meetings, events, and activities.

Our General Membership Meetings are broadcast live on Periscope.TV

If you have an Android or iOS device, go to the app store and download the Periscope application. It is free. If you don't have a device, any PC with a web browser will let you view it.

Go to **www.periscope.tv**. Using the search function, search for **W2MMD_MMDDYYYY**, where **MMDDYYYY** is the month , day, and year of the meeting.

The November 7th meeting will be W2MMD_11072018.

Need a ride to a Club meeting, event, or activity?
Just send a message to the Club's e-mail reflector :
GCARC <*at*> MAILMAN <*dot*> QTH <*dot*> NET
All members have access to this FREE service.

Tech Saturday Forum : November 10, 2018 @ 0900 Hours
W2MMD Clubhouse, Mullica Hill, NJ

Skype Meeting With:

Dr. Bob Heil, K9EID

Founder of Heil Sound
www.heilsound.com

Sound and Radio Engineer
Audio and Amateur Radio Innovator

Following Bob Heil's presentation, please stay to have an discussion about the presentation or any Amateur Radio subject.

We would like to invite all of our new members as well as our veteran members to our Tech Saturday Forums to help answer any questions and discuss any and all issues the new members have come across as they progress through the ***Amateur Radio Experience.***

The Discussion Theme is a QSO starting point - a way to initiate a conversation. All Tech Saturdays are an open QSO of all subjects of Amateur Radio interest.

All questions are welcome as well as a venue for hams to show off their latest ham radio projects or gadgets. Have a problem programming that HT, we can help! Not sure what radio or antenna to buy, we can help!

All Club members who would like Clubhouse access to use its radio equipment would have to have some brief "Elmering" on the Clubhouse rules, such as using the alarm system, the A/C and heaters, the antenna system, and the radio equipment.

All are welcome - hams and non-hams - club members and non-club members. Take a guided tour of our Clubhouse. Visit our HF and VHF/UHF/Satellite Operation Facilities and our vast antenna farm.

As always, refreshments and snacks will be served at every Tech Saturday.

The Tech Saturday Forum is held on the Saturday after the General Membership meeting.

Coming up on the December 8, 2018 Tech Saturday Forum is an in-person presentation provided by:

Paul Lamhut, WB2HHH : Digital Mobile Radio (DMR)

GCARC Fall Foxhunt *"Mobile T-Hunt"* XII
Sunday, November 4, 2018
1300 to 1400 Hours
By Jim Wright, N2GXJ

There's certain briskness in the fall air. Autumnal, some might call it. Could it be time for a radio direction finding fox hunt? Yes!

What's that, you ask? In short, it's a radio version of "hide and seek", and is great fun for the whole family, hams and non-hams alike! A copy of a slide show detailing the answer from a presentation given at an earlier GCARC Club meeting can be found on the **GCARC Fox Hunts** page. Check out smiling faces from hunts I, II, III, IV, V, VI, VII, VIII, IX, X, and XI linked from that page.

When is it? On a "Bye" day for the Eagles, of course! And it's on the day when we all get the extra hour of sleep after we "fall back" our clocks: Sunday November 4th, from 1-2pm. Surely you're running out of excuses now not to jump in with some family and friends and have some fun!

So what if you've never tried doing something like this before. Part of the fun is meeting new people and trying new things! Here's a quick run-down on the basics, and some hints for what to expect. There's stuff you can do in advance, and then there is the hunt!

In advance:

- Find a partner. It could be a friend, neighbor, spouse, family member, club member, or whomever. You're the ham. They don't have to be a ham. One drives, one navigates. Please don't try and do both at the same time. It can be sensory overload! Pull over and stop to take periodic signal strength measurements and/or bearings from a parking lot if you must. Be safe out there!
- Ahead of the event day, collect some maps, charge some radios, or do whatever you think you need to do to prepare however you think best to be ready to try and find the hidden transmitter in advance. During the hunt, as you get closer to the transmitter, the signal will get stronger. If you go past it, it will get weaker. If you want to pre-tune your listening radio, the transmitter will be on FM simplex, **146.565 MHz**. When you get close, within a hundred yards or so, you may be able to pick it up on the third harmonic, and finish your hunt by homing in on this frequency, **439.695 MHz**. Some people like to pre-program that frequency into their listening radio as well. You can see a picture of the transmitter on the right, and listen to a recorded sample of what you will hear on your radio when you are close to the transmitter on the **Fox Hunt XII** page.
- Oh, and if you have one, clip on your GCARC name tag and bring along a copy of your amateur license on event day. It can help explain what we are doing to the curious onlooker who might then get interested in the hobby themselves!

GCARC Fox Hunt XII - Continued on page 6

GCARC Fox Hunt XII - Continued from page 5

- The transmitter only has a range of a mile or so. If you can't hear the transmitter, then you know you are not that close. To help narrow down the starting search area, there will be an email sent out to the GCARC mailing list the day before, November 3rd. It will describe hunt boundaries that will narrow down the hunt area to just a few square miles somewhere here in Gloucester County. This information will be repeated on-air at the start of the event if you miss it. Smart hunters can use this advance information to their benefit.

Time for the Hunt, 1pm Sunday November 4th!

- On event day, pack your car and off you go. You are allowed to pre-position your hunt team wherever you like ahead of the event start time.
- By 1pm, please radio check-in your team with me, Jim N2GXJ, on our **2M Repeater (147.180 MHz+, PL 131.8 Hz)**. That way we all know who's out there, and will be able to check off hunt teams as they finish, and know if there is anyone left we need to talk in after an hour.
- After all teams have checked in, the transmitter will be activated, and the hunt is on! As your team closes in on the transmitter, you may encounter other teams hunting, sometimes going the opposite way. Who is right? Who will be first to find the hidden transmitter?
- As teams find the transmitter, they'll be encouraged to step away, to let other teams that are still hunting have a chance to find it on their own. If there are any teams still searching at the end of an hour, we'll help talk them in to the finish where the other teams will be waiting to exchange hunt stories near where the hidden transmitter had already been found.
- That's it! It is as simple as that!

Have fun out there! See you November 4th!

2019 Club Office Seats up for election at the December 5, 2018 General Membership Meeting

(1) President (1 Year Term) : Mark Gottlieb, WA2DIY
(1) Vice President (1 Year Term) : Jim Clark, KA2OSV
(1) Treasurer (1 Year Term) : Al Arrison, KB2AYU
(1) Recording Secretary (1 Year Term) : John Zaruba Jr, K2ZA
(1) Corresponding Secretary (1 Year Term) : Ron Block, NR2B
(2) Directors (3 Year Term) :
- **Jeff Garth, WB2ZBN and Jeff Welsh, KD2AZI**

(1) Director (To fulfill the unexpired term (2019) of Lee Marino) : Bob Durham, W2RAD
(1) Trustee (4 Year Term) : (Vote for one)
- **Lee Marino, N2LAM**
- **Chuck Lanard, KD2EIB**

Final nominations for candidates for the above listed offices must be submitted at the November 7th General Membership Meeting

Best Down Jersey DX Picks

November 2018

By Bill Grim, W0MHK

CALL	DATES	HIGHLIGHTS	DIFFICULTY (5=MOST RARE)	ENTITY
4S7KKG	11/01 - 11/30	HF/Mainly CW & Digital	4	Sri Lanka
VK9XQ	11/03 - 11/06	160-6M/CW, Digital (FT8)	4	Christmas Island
5R8UP	11/03 - 11/13	40-10M/CW, SSB	3	Madagascar
EL2EL/4	11/05 - 11/09	40-17M/CW, SSB, FT8	2	Liberia
VK9CH	11/06 - 11/10	160-6M/CW, Digital (FT8)	4	Cocos/Keeling Island
A35EU	11/16 - 11/27	160-10M/CW, SSB, RTTY, FT8	3	Tonga
EP6RRC	11/17 - 11/23	160-10M/CW, SSB, FT8 3 Stations	4	Iran
XV9D	11/18 - 12/02	40-10M/Modes ?	4	Vietnam
V63PSK	11/19 - 11/25	40-15M/FT8, JT65	3	Micronesia
YN	11/26 - 12/06	160-6M/CW, SSB	1	Nicaragua

Credits : NG3K Announce DX Operations : www.ng3k.com/Misc/adxo.html

Entity Of The Month : Christmas Island

Christmas Island is an Australian territory in the Indian Ocean, lying south of Java, Indonesia. A national park covers most of the 135 sq-km island, offering rainforest hikes to wetlands and waterfalls like Hugh's Dale. Native wildlife includes nesting seabirds and the red crab, a land species known for its late-fall migration to the sea. The island is ringed with snorkeling and diving reefs.

The first European to sight the island was Richard Rowe of the Thomas in 1615. The island was later named on Christmas Day (25 December) 1643 by Captain William Mynors, but only settled in the late 19th century

https://en.wikipedia.org/wiki/Christmas_Island

ARRL SNJ Section Manager's Report : September 2018

By Skip Arey, N2EI

Our Section currently has 1,157 Full Members and 52 Associate Members

Congratulations to **South Jersey DX Association** President and SNJ Section ASM Bob Schenck, N2OO, for being named guest speaker at the 66th Annual **W9DXCC Convention**, on September 15, 2018 at the Hyatt Regency Schaumburg in Chicago.

New Hams in our Section :
Ronald J Block, KD2QKS
Richard E Hada, KD2QLJ : Amateur Extra (soon to be W2ACD)

License Upgrades in our Section :
Michael A Teter, KB2NWG : Amateur Extra Class
William J Wood, KD2OSJ : General Class
William L Dennys, KD2DAO : General Class
James J Webster, KC2KFJ : General Class

73 de SKIP N2EI

ARRL Southern New Jersey Section
Section Manager: T J Arey, N2EI
n2ei <*at*> arrl <*dot*> org

Petty's Island Update 2

By Mark Gottlieb, WA2DIY

*"Good Evening Mr. and Mrs. America and all the ships at sea"...*W2MMD has been granted full permission to qualify Petty's Island on Saturday, December 8, 2018. The project will begin as early as 0800 Hours and run through 1230 Hours. Two stations will operate on 20M and 40M and must gather 25 contacts including 2 DX contacts for the qualification phase. Canada and Mexico do count as DX contacts

Just a reminder, under the **US Islands Awards Program**, an island has to be qualified before it can activated. Petty's Island has never been qualified. This will be the first event of this kind for our Club.

In addition, W2MMD has been granted full permission to activate Petty's Island in September 2019. This can be officially published on our website and elsewhere.

It should be made clear to all that security is very much on everyone's mind at Petty's. We have to show up on time to gain access since we have to sign on to the roster of those on the property at any one time.

If you would like to help out in any way with working this great Club project, please see me at the next meeting or e-mail me at : **wa2diy <*at*> comcast <*dot*> net**.

DA's and DIT's

Gary Reed, N2QEE, reports that the **October 11, 2018 VE Licensing Session** had one candidate: James KD2QPB, who passed the Technician exam
The VE's attending were: Ed N2RO; Frank W2FJM; Bob KD2UJ; and Jim N2GXJ.

Congratulations to **Glenn Showalter, WB2LDJ** (ex. WB7QBZ) for reclaiming his original callsign.

Starting with this **November 2018 Crosstalk** issue, the **Minutes** of the **General Membership Meeting** and **Board of Directors Meeting** will published for all members to review. To cut down on the *"flotsam & jetsam"* during the meetings, the minutes **will not be read aloud**. Any member may raise a question about what they read in the minutes during the meeting.

AREDN LAN Party

By John Zaruba Jr, K2ZA

On October 14, 2018 several members gathered at the Clubhouse for an AREDN LAN party. AREDN is the Amateur Radio Emergency Data Network and this was a follow-on activity to the Tech Saturday presentation by Randy Smith WU2S of the AREDN Project.

Several Ubiquiti Nanostation devices were upgraded to become AREDN nodes. There were experiments performed to further understand the mechanics of building both infrastructure and ad hoc mesh networks. Range tests were performed at various places on the 4H fairgrounds to get a feel for the performance of the devices.

John O'Connell K2QA, Jon Pearce WB2MNF, John Zaruba Jr K2ZA, and **Michael Covaleski N2MMC** were in attendance.

KB6NU's Ham Radio Blog

ARRL president suggests that we "re-brand" amateur radio

By Dan Romanchik, KB6NU

This Week in Amateur Radio recently reported (**https://bit.ly/2PQi3aI**) on a speech given by ARRL President, Rick Roderick, K5UR, at the 60th Annual West Virginia State ARRL Convention held August 25, 2018 at WVU Jackson's Mill Conference Center. Here are some things that he had to say:

> *"Are we even relevant anymore as ham radio operators? Well, let's see: We're world communicators. We provide public service. We help in emergencies and disasters. We help save lives. We talk to the jungles of Africa…to the beaches of the South Pacific. We bounce signals off the moon. We talk to astronauts. We promote technology. We do positive things. So absolutely—we are relevant.*
>
> *"We've got to accept change and we've got to adapt if we're going to bridge that gap to that next generation. So the question that I have here that I have challenged my colleagues at ARRL with is this: is it time to rebrand ham radio? Maybe we need to rebrand the American Radio Relay League. That's a pretty profound statement."*

Of course, I agree with K5UR on this and said so myself (**https://bit.ly/2CAj3Mj**) several years ago. Unfortunately, according to the report, he retreated to the same old ideas that the ARRL has been spouting for years:

> *"Well I think we ought to get out there and stir things up. That's what I think we ought to do. I think you ought to go back and rejuvenate your club. Over the next year, get somebody into ham radio. The second thing I want you to do….I want you to help a ham that needs your help. And the third thing I want you to do is - if you're not a member of the American Radio Relay League, you need to join today…because you know that whether you like us or not, we're all you've got; ain't nobody else in Washington DC helping us. I want you to ask yourself this question: don't you think it's time to give something back? Now I believe as a group, if we all did that we'll make a difference in this hobby as we go forward. Be a champion of ham radio. Let's work together and get it done. Thank you very much."*

I'd like to challenge K5UR and the ARRL to really stir things up. There are lots of us out here giving back by teaching classes, conducting exam sessions, and helping hams get on the air. That's not the problem.

What we need from the ARRL is real leadership, not just talk. Exhorting the troops is only going to go so far. For most hams, amateur radio is only a hobby, and they do what they can. It's really up to the ARRL to provide the leadership that ties it all together and provide the framework that will allow us all to be successful.

Saying, "Whether you like us or not, we're all you've got; ain't nobody else in Washington DC helping us" doesn't really cut it. You have to show people that you're really making a difference, not just say you are.

When he's not giving the ARRL the benefit of his opinions, Dan blogs about amateur radio, writes exam study guides (**www.kb6nu.com/study-guides**), and operates CW on the HF bands. Look for him on 30m, 40m, and 80m. You can email him your thoughts about the ARRL at **cwgeek <*at*> kb6nu <*dot*> com**.

Existing FT8 mode will become obsolete this year

By Jim Wright, N2GXJ

What is changing?

The super popular WSJT-X software package is getting a major update this December. As part of this update, the messaging formats for FT8 and MSK144 protocols are being changed. These changes allow for more bits per message, and greater error correction on those bits for even better weak signal performance, along with some other improvements. However, these new message formats are not compatible with the versions in use today. An early version is in beta testing now. Here's what you need to know.

How does this affect me?

If you are a digital modes contester, hold onto your hat! As described in the October 17 quick start guide for experienced users, "these changes enable new message formats for efficient, robust QSOs in North American VHF contests, European VHF contests, ARRL Field Day, and the ARRL RTTY Roundup". I'll let that sink in for a minute.

It was just last month, in the October 2018 Crosstalk article titled "Where'd Everybody Go?" that the undeniable influence FT8 is having on our hobby was discussed. One of the last questions asked was "How about an FT8 field day mode?" Well, there it is! FT8 just became contest mode capable, and this is all blessed by the ARRL (**www.arrl.org/news/ft8-to-be-permitted-in-2019-arrl-rtty-roundup**). I'd expect to see some "FT-8" mode only contests springing up soon. Love it or hate it, FT8 continues to innovate, grow, and evolve. Let's see where this goes from here. Hey 2019 Field Day chairman, sign me up to operate a field day digital mode station now!

```
CQ FD K1ABC FN42
   K1ABC W9XYZ 6A WI
W9XYZ K1ABC R 2B EMA
   K1ABC W9XYZ RR73
```

Example ARRL Field Day exchange mode being added to FT8

I'm not interested in contesting with FT8. Do I need to update my current software?

Yes. The new and old versions of the protocols are not interoperable. The version 1.x protocols in use today are going to be obsolete. The current 1.9.1 version of FT8 and MSK144 will no longer be supported. It's not a stretch to predict that by year's end, if you want to have QSOs in FT8 with most anybody, you'll need to be on the new 2.0 version or you'll have next to nobody left to have contacts with.

To be fair, most, but not all the improvements involve contesting. There are other improvements in the new version non-contesters may benefit from as well. For example, it is described that the WSPR decoder has better sensitivity now by about 1 dB. For FT8, symbol rates and occupied bandwidths are the same as before, but decoding sensitivity is slightly improved and false decode rates are described as being significantly lower. To help you search for, and catch that rare missing DX, color highlighting of decoded stations now lets you identify missing DXCC entities on a per-band basis. Additional color codings can now let you know if the station is an active LoTW user or not, using information automatically downloaded from the ARRL web site, to improve your odds of picking a station likely to confirm your QSL.

Can I participate in beta trials of the 2.0 version while it is still in development?

Yes. On-air testing with the new protocols started in September. You may already have noticed some strange new signals on the waterfall during this testing period at the high end of the current FT8 watering

FT8 Mode Obsolete - Continued on page 12

FT8 Mode Obsolete - Continued from page 11

holes. Look for them near 7.078 and 14.078 MHz on your radio dial. You can participate in the trial period by downloading the latest release candidate (rc) for WSJT-X 2.0 from the official website: **https://physics.princeton.edu/pulsar/k1jt/wsjtx.html**. See the quick start guide for experienced users linked from that site for more details associated with configuring the software for 77-bit messages and for special operating activities.

When is the official switch over when we need to be on the new version?
The release of a generally available (GA) version is scheduled for December 10, 2018. By design, this release schedule makes WSJT-X 2.0 usable for the ARRL sponsored January 5-6 RTTY Roundup and January 19-21 VHF Sweepstakes.

600 Watts @ W2MMD Clubhouse
September 28, 2018
By Mark Gottlieb, WA2DIY

Band seemed open today. Pile up for Congo and just couldn't get his attention

Time	Call	Band	Freq	Mode	Grid[2]	Location	Comment
20:37	PV8AL	20M	14.180	SSB	FJ92ns	Brazil	Hélio De Oliveira Alves
20:30	YV5ENI	20M	14.252	SSB	FK60nh	Venezuela	Luis Romagni
20:24	IZ1PNT	20M	14.210	SSB	JN44is	Italy	Andrea Protto
20:22	F4HZZ	20M	14.220	SSB	JN27uj	France	Michel Ebran
19:47	HB0/DL5YL	20M	14.030	CW		Liechtenstein	Tina & Manfred Ockert
19:33	9Z4Y	20M	14.012	CW	FK90hm	Trinidad and Tobago	Mark Fraser
19:22	ZD7FT	20M	14.195	SSB	IH74db	Saint Helena Island	Peter Constantine
19:01	FP/DK7LX	20M	14.033	CW		Saint Pierre & Miquelon	Georg Knoess
18:51	HA7RY	20M	14.007	CW	JN97op	Hungary	Tamas Pekarik
18:49	HA8FM	20M	14.011	CW	KN06ag	Hungary	Illes Tibor
18:30	OM0ET	20M	14.240	SSB	KN08uv	Slovak Republic	Paul Timkovic
18:24	S57DX	20M	14.237	SSB	JN75dx	Slovenia	Slavko Celarc
18:18	EL2EF	20M	14.208	SSB		Liberia	Eric Forkpa
18:12	SV9ANK	20M	14.186	SSB	KN25ni	Crete	Nikos Vardaxis
18:00	OM2VL	20M	14.256	SSB	JN87tx	Slovak Republic	Vegh Laszlo
17:59	IK6BGJ	20M	14.262	SSB	JN72ck	Italy	Giustino Bottino
17:32	OL100CSR	20M	14.225	SSB		Czech Republic	Czech Radio Club - 100th Anniversary of the creation of The Czechoslovakia Republic

100 Watts + Buddipole @ Mary Mazza Duffy Park
September 29, 2018
By Mark Gottlieb, WA2DIY

"Band, again, seemed active despite the poor solar flux reading. Australia came in long path towards the end of the afternoon at 5/7-5/9. I got a 5/5. FT897D was the rig on battery power (Bioenno Lithium Iron Phosphate Model BLF-1230LB). Buddipole Long Version (18' horizontal dipole config.)"

Time	Call	Band	Freq	Mode	Grid[2]	Location	Comment
21:41	KJ5MA	20M	14.252	SSB	EM12eq	Aledo, TX	Mack Avery
21:29	VK4FX	20M	14.188	SSB	QG62ns	Australia	Mark Thorley (Long Path)
21:16	KG5RJ	20M	14.253	SSB	EM12ox	Dallas, TX	Gregory Hall
21:11	W5HFF	20M	14.245	SSB	EL29co	Richmond, TX	Earl Ross Lawler Jr
21:08	9X0T	20M	14.192	SSB		Rwanda	Silvano Borsa
21:04	KR5G	20M	14.320	SSB	EM22nb	Henderson, TX	Eric Smith
21:00	N5IT	20M	14.305	SSB	EM11kk	Waco, TX	David Pollard
20:55	K5LGX	20M	14.290	SSB	EM13kf	Denton, TX	Clark Highsmith
20:52	WW1USA	20M	14.265	SSB	EM29qb	Kansas City, MO	National World War 1 Museum Amateur Radio Club
20:48	W5RTA	20M	14.239	SSB	EL09lt	Bandera, TX	South Texas DX and Contest Club
20:18	NU5DE	20M	14.241	SSB	EM10jh	McDade, TX	Naturist Amateur Radio Club
20:15	YV5ENI	20M	14.257	SSB	FK60nh	Venezuela	Luis Romagni
20:05	W5RRR	20M	14.250	SSB	EL29kn	Houston, TX	Johnson Space Center Amateur Radio Club
20:03	N5ZC	20M	14.252	SSB	DM95cb	Amarillo, TX	Richard Thorne
19:35	WD5DDH	20M	14.294	SSB	EM12oh	Waxahachie, TX	Ellis County Amateur Radio Club
19:28	K5LLA	20M	14.262	SSB	EM10cn	Leander, TX	Gene Howard

November 6, 2018

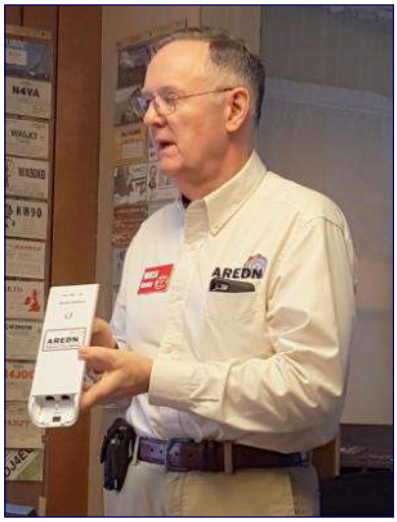
November 9, 2018

The FCC has launched a new podcast series, More Than Seven Dirty Words (https://www.fcc.gov/news-events/podcast).

The new media outlet will feature interviews with FCC officials and staff in addition to others in the communications arena. The podcast aims "to share untold stories, explain important policy issues, and maybe even do the impossible - make telecom interesting," the FCC said in announcing the new media outlet. "One of the wonderful things about the digital age is the many ways to share information, so we're excited to launch this new FCC podcast," said FCC Chairman Ajit Pai, who shares some banter in an introductory segment with program host, FCC Policy Advisor Evan Swarztrauber. Guests will share their personal stories behind FCC news headlines and break down various telecommunications-related issues.

The podcast's title is drawn from the first episode's introductory discussion, which touches on the court fight over George Carlin's "Seven Dirty Words" and the fallout from the 2004 Super Bowl halftime show. The first podcast, "Puerto Rico se Levanta," runs 22 minutes and focuses on the FCC's response to the 2017 Puerto Rico hurricane disaster. Each episode will be available at: **https://www.fcc.gov**, as well as on iTunes and Google Play.

Article Credit : The ARRL Letter for August 31, 2018 - **www.arrl.org**



Excellent turn-out at our October Tech Saturday Forum on MESH Networking presented by Randy Smith, WU2S, President of the AREDN, Inc.

Regional (Atlantic & Hudson Divisions) Hamfests and Events

November 3, 2018 : New Jersey Antique Radio Club NJARC Fall Swapmeet Hamfest, Parsippany PAL Building, 33 Baldwin Road, Parsippany, NJ. **www.njarc.org**

November 4, 2018 : Washington Amateur Communications WACOM Hamfest, Printscape Arena, 114 Southpointe Boulevard, Canonsburg, PA. **www.wacomarc.org**

November 23, 2018 : Fair Lawn Amateur Radio Club Ham Radio Auction, Fair Lawn Senior Center, 11-05 Gardiner Road, Fair Lawn, NJ. **www.fairlawnarc.org**

Howard E. Michel, WB2ITX, - New ARRL Chief Executive Officer

The ARRL Board of Directors has elected Howard E. Michel, WB2ITX, of Dartmouth, Massachusetts, to be ARRL's new Chief Executive Officer. He will start on October 15. Michel (rhymes with "nickel") is currently Chief Technology Officer at UBTECH Education, and Senior Vice President of UBTECH Robotics, a $5 billion Shenzhen, China, artificial intelligence and robotics company. As the Chief Technology Officer at UBTECH Education, Michel helped build this company from a startup in China to $100 million in valuation.

"I have Amateur Radio to thank for starting me on a very successful career, and I'm excited about the opportunity to further ARRL's goals as CEO. Leading the League will allow me to 'give back' to a great community and provide a similar opportunity for future generations," Michel said. "I have been a licensed ham for 50 years, and I've seen many changes in the hobby. One of my top priorities as CEO will be to develop new products and services so all hams, whatever their license class or interest, find value in League membership," he added.

Michel was first licensed as WN2ITX when he was about 16 and upgraded to General and Advanced within a year. He earned his Amateur Extra-class license in 2000. "I've operated W/AM/FM/SSB/digital on 80/40/20/15/10/2, on equipment that I have either built, repaired, or modified," he said.

ARRL President Rick Roderick, K5UR, said, "We are excited to have someone of Howard's qualifications to lead this organization. Howard's management experience, along with his experience at leading a membership-driven association, makes him an ideal person to move this organization forward."

In 2015, Michel served as president and CEO of the Institute of Electrical and Electronics Engineers (IEEE), a volunteer position.

"In any large membership-led organization such as ARRL, its members and volunteers are its greatest asset, and a good staff-volunteer relationship is crucial to its success," Michel said. "I intend to build on this relationship and multiply and amplify the efforts of both staff and volunteers in furthering ARRL's goals to advance the art, science, and enjoyment of Amateur Radio."

Michel is a retired US Air Force officer, having served as a pilot, satellite launch director, engineer, and engineering manager. During his time in the military, wherever he could set up an antenna, he took the opportunity to operate.

Michel earned his bachelor's degree in electronic engineering from New Jersey Institute of Technology, a master's degree in electronic and computer engineering from the University of Massachusetts, and a master's degree in systems management from the University of Southern California. He holds a PhD in computer science and engineering from Wright State University.

His noteworthy academic background further includes current service as a visiting professor in the Department of Electrical and Electronic Engineering Science at the University of Johannesburg in South Africa. Previously, he was on the faculty of the University of Massachusetts Dartmouth and of the University of Dayton.

New ARRL CEO - Continued on page 16

New ARRL CEO - Continued from page 15

Michel says that some of his favorite activities include attending hamfests to find old stuff to repair or repurpose, contest operating, and DXing, especially on 80 and 40 meters. He is a Life Member of the Southeastern Massachusetts Amateur Radio Association.

Michel will succeed Barry J. Shelley, N1VXY, who had been serving as ARRL's CEO since January, following the resignation of Tom Gallagher, NY2RF. Shelley previously served ARRL's Chief Financial Officer since 1992.

Article Credit : The ARRL Letter for August 31, 2018 - **www.arrl.org**

Jeffrey Welsh, KD2AZI

Show Us Your Shack!

What am I doing in the shack?

My first interest was vintage radio and I do quite a bit of repair. My daily driver is a Swan 500c with a Gap Titan DX vertical due to space constraints. I operate mostly on 20 Meters and enjoy DXing and plain-ol' rag-chewing. Recently I paired up a Yaesu FL-2100B amplifier that I purchased from Club member Lee Marino, N2LAM.

Since joining the Club, I've been exposed to several new modes, and recently purchased a starter HT, the Yaesu FT-4x. I'm having a fun time operating on 2M and 70cm repeaters. I hike quite frequently and I'm excited about the prospect of using the HT from mountain tops. I live in Haddonfield, and can hit the Club 2 Meter repeater if I hook up the HT to a 3 element Yagi, and point it south. I'm now planning to build a 2M J-Pole, and would like to get a 2M radio with a bit more power.

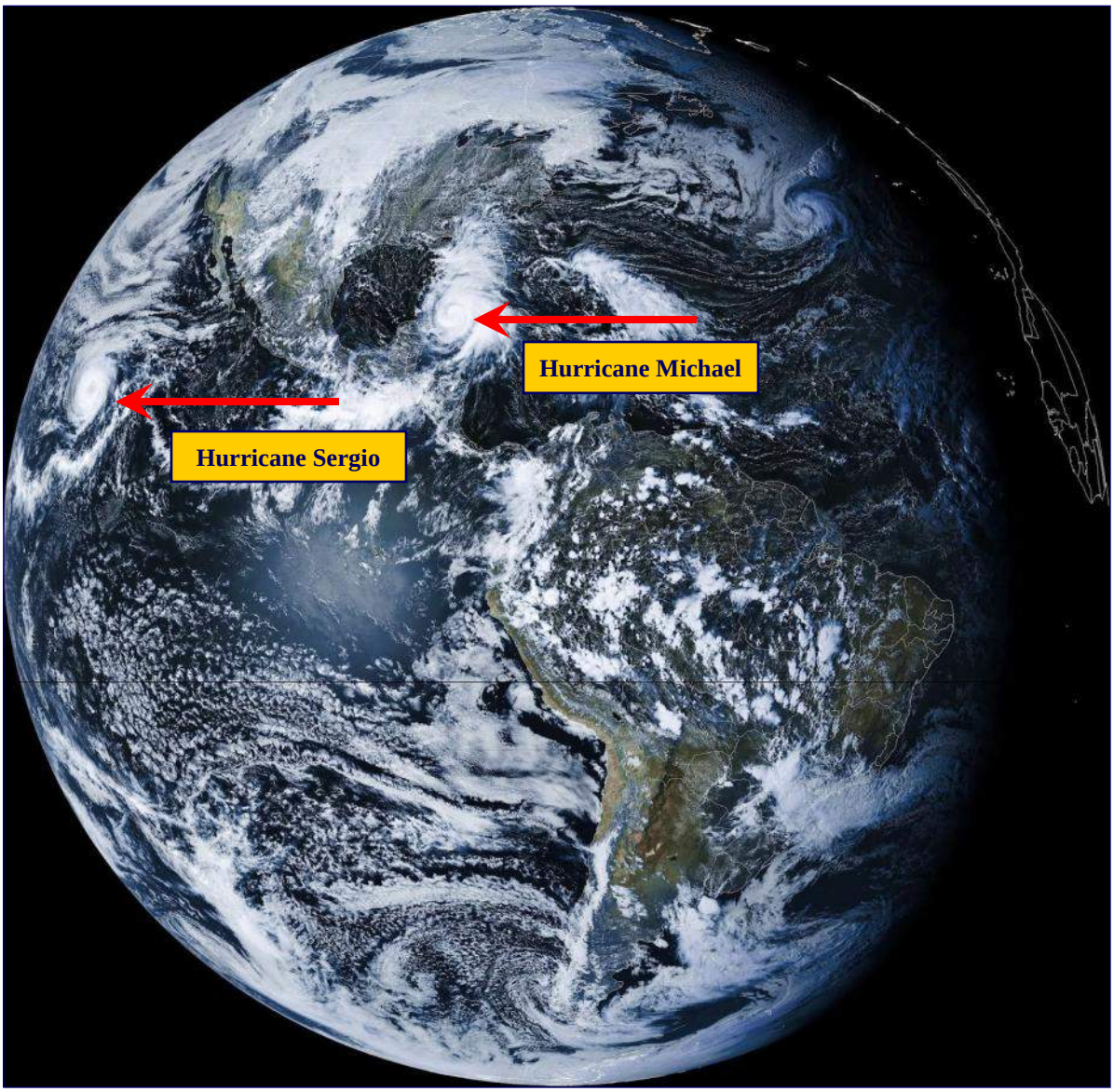
Although I have plans for several vintage-tech operating positions, I'm excited to get current with technology. Club members have demonstrated new Yaesu equipment, satellite operating, as well as software defined radio systems, and I'm looking for a chance to upgrade. I'm glad to be a Club member! If you need vintage parts, or are selling newer equipment slightly used please reach out to me.

W2MMD Satellite Station

By Jon Pearce, WB2MNF
September 30, 2018

If you've been to the Clubhouse over the past couple of weeks you may have seen the BBQ grill-type antenna that's tie-wrapped to one of the picnic tables. That's a 1.7 GHz antenna that we're using to try to copy the images transmitted by the GOES series of weather satellites that are in geostationary orbit 23,600 miles above the equator. We've been challenged by issues with antenna aiming, working at microwave frequencies and rain, but K2QA and I finally achieved some success yesterday in copying high-res images from GOES-16. Checking the files shows about 700 more pictures downloaded from the satellite over the last 2 days.

GOES satellites transmit beautiful high-res shots of the entire earth, which we're hoping to receive by leaving the decoder running (it runs on a Raspberry Pi), so hopefully by Tech Saturday we can show some more stunning images, but given that this satellite is further away than anything on Earth can possibly be, we are claiming the GCARC SWL DX record with these pix! More information is at the W2MMD Satellite Blog at: **www.w2mmdsatellite.blogspot.com**, if you're interested in this project.



Digital Mobile Radio Hotspots May Be Interfering with Satellite Uplinks, AMSAT Reports

This week, AMSAT News Service (ANS) cited an August 27 report from AMSAT Vice President-Operations Drew Glasbrenner, KO4MA, saying that a digital mobile radio (DMR) signal has been interfering with the AO-92 (Fox-1D) satellite's 435.35 MHz uplink frequency. Glasbrenner said hotspots, repeaters, terrestrial simplex, and "anything not satellite" should never transmit in the segments 145.8 - 146.0 MHz or 435 - 438 MHz by international band plan.

Well-known satellite enthusiast Patrick Stoddard, WD9EWK/VA7EWK, told ARRL that one DMR hotspot operating on the AO-92 uplink frequency in the St. Louis area has shifted to another frequency. But, he added, "I think there are still issues, since not all hotspots will report their frequencies and positions to websites such as BrandMeister (**https://brandmeister.network**) or via APRS, where they appear on other sites such as **http://aprs.fi**."

"There are others surely operating near satellite uplinks," Stoddard added. "For many, the 435 - 438 MHz satellite subband is a big piece of quiet real estate in a busy part of the 70-centimeter band for weak-signal work, repeater links, amateur TV, and other possible uses."

Stoddard points out that FCC Part 97 addresses Amateur Radio operation in these segments, although regulations in many other countries may not be as detailed. §97.3(a)(7) defines auxiliary stations as, "an amateur station, other than in a message forwarding system, that is transmitting communications point-to-point within a system of cooperating amateur stations."

Stoddard said this would include remote bases, EchoLink and IRLP nodes, and hotspots used for digital voice modes, as well as stations using these hotspots and nodes. Auxiliary stations may not transmit in the 145.8 - 146.0 and 435 - 438 MHz satellite subbands (among others in the 2-meter and 70-centimeter amateur bands), per §97.201(b). Further :

- §97.3(a)(40) defines a repeater as, "an amateur station that simultaneously retransmits the transmission of another amateur station on a different channel or channels." Stoddard said that because most hotspots operate on a discrete frequency, they would not qualify as repeaters, even if they operate like a repeater, per §97.205(b).
- §97.101(a) stipulates, "In all respects not specifically covered by FCC Rules, each amateur station must be operated in accordance with good engineering and good amateur practice." Stoddard remarked, "Whether the hotspot is interfering with a satellite downlink in a particular area, or it is interfering with the satellite uplink affecting a much larger area, this would not be good amateur practice."
- In addition to subbands where hotspots are not permitted, Stoddard said, §97.101(b) is also relevant. It states, "Each station licensee and each control operator must cooperate in selecting transmitting channels and in making the most effective use of the Amateur Service frequencies. No frequency will be assigned for the exclusive use of any station."

Stoddard noted that frequencies used by satellites are usually incapable of being changed and are coordinated in advance of launch, while hotspots typically are frequency agile, and the frequencies used by those systems can be changed to avoid potential interference to satellites and other stations. - Thanks to AMSAT News Service, Patrick Stoddard, WD9EWK/VA7EWK

Article Credit : The ARRL Letter for September 6, 2018 - **www.arrl.org**

Reverse-Polarity Sunspot Group Does Not Belong to Cycle 25, Observatory Says

The Royal Observatory of Belgium's Solar-Terrestrial Centre of Excellence (STCE http://www.stce.be) has asserted (**http://www.stce.be/news/436/welcome.html**) that the reverse polarity sunspot group 2720 observed in late August belongs to the current solar cycle - Cycle 24 - and does not represent the start of Cycle 25.

"Because of its reversed polarity, some websites claimed sunspot group 2720 was possibly one of the first groups of new solar Cycle 25," the Centre said. "This is simply not true, in view of its very low 8° latitude. The next solar Cycle 25 sunspot group should have both reversed magnetic polarity and much higher heliographic latitude, typically 20° to 40° from the equator. Only two tiny, short-lived numbered sunspot groups are currently assigned to new solar Cycle 25, sunspot group 2620 in December 2016 and 2694 in January 2018."

STCE said that while both of those small sunspots have been assigned to Cycle 25, some uncertainty exists as to just which sunspot cycle they actually belong to. STCE said some additional sunspot groups that belong to Cycle 25 were so tiny and short lived that they were not assigned a sunspot number. "During each solar cycle, about 3% of all active regions have reversed polarity but do not belong to the previous or next solar cycle," the Centre said. "With 2,000 to 3,000 sunspot groups per solar cycle, this means that every solar cycle has a few dozen reverse-polarity sunspots that belong to the ongoing sunspot cycle despite their reverse polarity."

After examining magnetograms of the sun's surface, well-known Amateur Radio solar observer and propagation authority Carl Luetzelschwab, K9LA, agreed that AR2720 is reversed in polarity from other sunspots in the northern solar hemisphere. What confuses the issue, he said, it its low latitude, as a Cycle 25 sunspot area should be at a much higher latitude.

The same weekend of sunspot group 2720, a radio blackout lasting about a day took place, affecting the HF amateur bands as well as GPS systems. Solar watcher Tamitha Skov, WX6SWW, in her YouTube report (**https://www.youtube.com/watch?v=7qs2RLdHDqU&feature=youtu.be**), called the G3-level geomagnetic storm "one of the top five storms of the solar cycle."

As ARRL Propagation Reporter Tad Cook, K7RA, noted in his August 31 edition of The K7RA Solar Update, "For HF operations, we want to see high solar flux and sunspot numbers and low A index, a measure of geomagnetic instability. On Sunday, August 26, we saw high A index numbers from an unexpected crack, opening in Earth's magnetic field. Solar wind spewed forth, and the planetary A index rose to 76. During this period the planetary K index - a component of the A index - rose to 7 over a 6-hour period. Seven is a big K index number."

Cook went on to note that Alaska felt the full force of the geomagnetic storm, with an A index in Fairbanks of 90 - a very high number.

www.arrl.org/news/reverse-polarity-sunspot-group-does-not-belong-to-cycle-25-observatory-says

Article Credit : The ARRL Letter for September 6, 2018 - www.arrl.org

No-Test Upgrading to General from Technician Plus

By Urb LeJeune W1UL

Prior to March 21, 1987, the theory test for both the General and Technician exams were one and the same. The only difference between Technician and General Class was, people testing for General took a 13 WPM code test while people testing for Technician took a 5 WPM.

When the code requirements were dropped from amateur licensing requirements the Technicians licensed before March 21, 1987 were officially called Technician Plus license holders. Holders of Technician Plus licenses are eligible for an automatic, no-test upgrade to General. If you are in this category you must do the following :

1. You must be currently licensed as a Technician Plus
2. Provide proof you were licensed before March 21, 1987.
3. Attend a VE session and fill out all paperwork and pay the $15.00 fee since this is an upgrade.

I have an old call book and can supply you with the necessary information to satisfy requirement #2 above. If you're not local send me a stamped self-addressed number 10 envelope.

Urb LeJeune W1UL
15 Hunter Drive
Tuckerton, NJ 08087

609-937-5487 if you have any questions.

73 Urb W1UL urb@ham-cram.com

November 10, 1775

Constitution Change 2018-01 - Life Family Membership

The Constitution Committee is considering a change that would allow for a new class of membership: Life Family. This new class of membership would only be available to a Life member's immediate family who are licensed and who live in the same household. This change is being brought about by a member who wants to become a Life member and who's spouse is licensed and is also interested in a life membership.

Please read the proposed changes so that we may discuss them at the November and December General Meetings. A vote is planned for December. Here is a link to the current copy of the Constitution: **https://gloucestercountyarc.weebly.com/uploads/1/1/5/5/11554662/constitution_2018-01.pdf**

The proposed changes are as follows:

ARTICLE VI - MEMBERSHIP
Section 2. (Add Life Family, wording cleanup)

> All members shall be entitled to all privileges of the CLUB (subject to the privileges of the member's Amateur license). Only Life, Life Family, Full, and Family members may hold an office or be a Director. Life Associate, Associate and Honorary members shall have no voting privileges.

ARTICLE VI - MEMBERSHIP
Section 3.
Life Member. (Clarification added)

> A Member in good standing, who holds a valid amateur radio license, may apply to the Board of Directors for Life Membership. Upon approval, the candidate shall pay dues equal to twenty (20) times the current "short rate" annual dues. Life Membership dues may be paid in one lump sum, or in three (3) equal payments within one (1) year from the date of approval. Under no circumstances will payments for life membership be refundable. A Life Member shall enjoy all the rights and privileges of a Full Member (subject to the privileges of the member's Amateur license). If the Life Member's license expires during any given year, the member shall continue to enjoy all the rights of a Life Member until the end of that year. At that time, the Life Membership shall become a Life Associate Membership. Life Associate Membership shall not be a category of membership offered to any applicant. Upon renewal of the Life member's Amateur license, the status of the member's category shall revert to Life Membership after review and approval by the Board of Directors.

ARTICLE VI - MEMBERSHIP
Section 3A.
Life Family Member (new)

> A Life Family Membership shall be available to those persons who hold a valid Amateur Radio license, who live in the same household, and who are members of the immediate family of a Life Member. The candidate shall apply to the Board of Directors for a Life Family Membership. Upon approval, the candidate shall pay dues equal to twenty (20) times one-half (1/2) of the Full Member rate. Life Family Membership dues may be paid in one lump sum, or in three (3) equal payments within one (1) year from the date of approval. Under no circumstances will payments for Life Family Membership be refundable. A Life Family Member shall enjoy all the rights and privileges of a Full Member (subject to the privileges of the member's Amateur license). If the Life Family Member's license expires during any given year, the member shall continue to enjoy all the rights and

Constitution Change - Continued on page 22

Constitution Change - Continued from page 21

privileges of a Life Family Member until the end of that year. At that time, the Life Family Membership shall become a Life Associate Membership. Upon renewal of the Life Family member's Amateur license, the status of the member's category shall revert to Life Family Membership after review and approval by the Board of Directors.

Thanks,
Ron Block, NR2B

Gloucester County Amateur Radio Club
Meeting of the General Membership
October 3, 2018

The meeting was called to order by Vice President Jim Clark, KA2OSV, @ 1930 Hours. 39 members were in attendance.

The minutes of the September 5, 2018 meeting were not available.

Jim welcomed visitors Paul Cosenza and Tom Herron who are not yet licensed as well as Mary Delemarre, KD2PLH.

Treasurer's Report : Al Arrison, KB2AYU, reported the YTD inflow of $8,632 against $5,854 in regular budgeted expenditures resulting in a positive inflow of $2,778. Total cash in all accounts is $20,479.

Committee Reports :

Hamfest : Sheldon Parker, K2MEN, reported the Hamfest had been a success thanks to the many Club members who had volunteered and worked hard. He noted that forum attendance had doubled since last year thanks to the efforts of Ron Block, NR2B, and his team. The remnants of Hurricane Florence which inflicted historic damage to the Carolinas, didn't arrive in NJ until the day after our sunny 80 degree Hamfest. Al Arrison said gate entry ticket sales and net profits were about the same as last year.

Clubhouse : Al Arrison, KB2AYU, requested volunteers for an upcoming work party planned for shed repairs. He said the roof had been replaced 5 years ago, but the siding and doors now need replacement.

Constitution : Ron Block, NR2B, announced a constitution change proposal relating to life membership. Currently life membership is available for individual members only. He proposed constitutional wording and a fee schedule to accommodate family members in the same household wishing to become life members. Since 15 member signatures are required as part of the process, he provided a document with proposed wording changes for members to sign.

Old Business :
None.

New Business :

Amplifier for Clubhouse : Bill Price, NJ2S, purchased a used Ameritron ALS600 600 watt amplifier at the hamfest for a bargain price of $575. He offered to sell it to the Club for his cost. He noted it will require a $35 modification for 10 meter operation. A motion was made for the Club to allocate $605 for the amplifier purchase and modification from savings. The motion was passed by a vote of the members present.

Membership badge replenishment : Chuck Colabrese, WA2TML, indicated that blank badge inventory was only 9 and additional blanks would be needed. Since this expense had not been budgeted, he suggested a motion be made to purchase 125 blanks at a cost of $455. A motion was made and passed by a vote of the members present.

October 2018 General Membership Meeting - Continued on page 24

October 2018 General Membership Meeting - Continued from page 23

Petty's Island : Mark Gottlieb, WA2DIY, reported he had visited the island in the Delaware River near Pennsauken as part of the process to get approval for qualification and activation for the US Islands Award Program. He provided some photos and information about the island. He said qualification operations were scheduled for December 8, 2018, and that 25 contacts to include 2 DX stations would be required.

New projector : Mark Gottlieb, WA2DIY, recommended the purchase of a projector for the Clubhouse to accommodate the numerous Skype presentations planned on future Tech Saturdays. A motion was made and passed by a vote of the members present to purchase a projector for $130.

Director replacement : Jim Clark, KA2OSV, reported that Lee Marino, N2LAM, had resigned as Director and a replacement was needed. Lee Marino's term expires at the end of 2019. Bob Durham, W2RAD, was recommended and appointed by Jim to fulfill the Director post for the remainder of 2018. Per the Club's Constitution, Bob has be elected at the December 5th General Membership Meeting to fulfill the 2019 term.

Elections for expiring year end positions : The following members were nominated from the floor:

- President : Mark Gottlieb, WA2DIY
- Vice President : James Clark Sr, KA2OSV
- Treasurer : Alan Arrison, KB2AYU
- Recording Secretary : John Zaruba Jr, K2ZA
- Corresponding Secretary : Ron Block, NR2B
- Director : Jeff Garth, WB2ZBN
- Director : Jeff Welsh, KD2AZI
- Director : Bob Durham, W2RAD (Fulfilling Lee Marino's term for 2019)
- Trustee : Lee Marino, N2LAM

There being no further business, the meeting was adjourned at 2017 Hours. The program for the evening focused on SDR technology and was provided via Skype by Will Jourdain,AA4WJ, National Sales Representative, ICOM America.

Respectfully Submitted,
Sheldon Parker, K2MEN, Acting Recording Secretary

Gloucester County Amateur Radio Club
Board of Directors Meeting Minutes
October 17, 2018

In attendance:

Jim Clark KA2OSV, President
Alan Arrison KB2AYU, Treasurer
Jeff Garth WB2ZBN, Director
Mark Gottlieb WA2DIY, Trustee
John O'Connell K2QA, Member
Bill Price NJ2S, Director
Bob Durham W2RAD, Director
Ron Block NR2B, Corresponding Secretary
John Zaruba K2ZA, Director / Acting Recording Secretary

Meeting Opened : 1903 Hours

Treasurers Report:

- Budgeted Items Year-to-date:
  - Income: $8682
  - Expenses: $5901
  - Net: $2781
  - Funds in all accounts: $19748

Committee Reports:

None

Old Business:

- Shed re-siding project discussed. Date to be determined, possibly late October.
- Discussed quote for adding card reader to clubhouse security system. Engineering opinion from Napco tech support to determine feasibility.
- Discussed production of training video on operation of clubhouse security system.
- Discussed rules or terms of use for clubhouse facility.
- Treasurer reported cost of club liability/property insurance escalating annually.
- Waiting for Petty's Island operation approval from Audubon Society, expected imminently.

New Business:

- Discussed moving January 2019 General Membership meeting to 01/09/2019 due to holiday. Meeting will remain as scheduled for 01/02/2019.
- Discussed January 2019 General Membership Meeting guest presentation logistics.
- Discussed February 2019 General Membership Meeting guest presentation topics.
- Discussed November Tech Saturday presentation (Bob Heil, K9EID - Skype call) logistics.
- Replacement Director term and process discussed.
- Copies of Bylaws, Constitution, and Corporate Charter to be reviewed by an attorney to determine process for obtaining IRS 501(C)3 charitable organization status.

October 2018 Board of Director Meeting - Continued on page 26

October 2018 Board of Director Meeting - Continued from page 25

- Discussed sale of surplus club equipment to obtain funds for future equipment upgrades while minimizing budget impact.
- Discussed used of 4-H bucket truck for Clubhouse site maintenance tasks.
- Discussed change in Minutes procedure. Will now publish both General Membership and Board of Directors meeting minutes in the official Crosstalk newsletter. Public reading of meeting minutes will be dispensed with save for asking for additions or corrections.
- Resumption of Foxhunts discussed.
- New Members :

  Thomas Herron (No Call) Associate Member
  Robert Gibison KB2YBQ Full Member
  James Blose KD2QPB Full Member
- Discussed need for pest control treatment for mice before the onset of winter.
- Discussed logistics of club logo clothing items group purchase.
- Constitutional amendment to add Family Life Membership class discussed.

Meeting adjourned at 2042 Hours

Respectfully Submitted,
John Zaruba Jr, K2ZA
Director / Acting Recording Secretary

November 11, 2018

November 11, 1918 @ 1100 Hours

"The 11th Hour of the 11th Day of the 11th Month"

California QSO Party
October 6, 2018

Call: N2CQ
Operator (s) : N2CQ
Station: N2CQ

Class: SO (A) Fixed LP
QTH: SNJ
Operating Time (hrs):
Location: Out of State/Province

Summary:

Bands	CW Qs	Ph Qs
20:	77	0
15:	8	0
Total:	85	0

Mults: 39
Total Score: 9,945

Club: Frankford Radio Club

Comments:

Pennsylvania QSO Party
October 13, 2018

Call: N2CQ
Operator (s) : N2CQ
Station: N2CQ

Class: SOCW QRP
QTH: SNJ
Operating Time (hrs): 8
Location: Out of State/Province

Summary:

Bands	CW Qs	Ph Qs	Dig Qs
80:	16	0	0
40:	64	0	0
20:	2	0	0
Total:	82	0	0

Mults: 46
Total Score: 15,088

Club: Frankford Radio Club

Comments:
No QSO with N3LI
Score: 82 x 2 (CW) x 46 Mults x 2 (QRP) = 15,088
Some could not copy the QRP signal, but many surprised me!

Pennsylvania QSO Party
October 13, 2018

Call: WA2FZB
Operator (s) : WA2FZB
Station: WA2FZB

Class: SO Mixed HP
QTH: SNJ
Operating Time (hrs): 6
Location: Out of State/Province

Summary:

Bands	CW Qs	Ph Qs	Dig Qs
160:	4		
80:	31	14	
40:	37	37	
20:	3	1	
Total:	75	52	0

Mults: 50
Total Score: 10,300

Club: Frankford Radio Club

Comments:
Not a serious effort for me, just tuned around the bands when I had some time. Many counties that I worked last year were conspicuously absent this time around. 73.

Element 3 General Class License Question Quiz

Questions from the Element 3 General Class License Question Pool. This will be regular feature to help Technicians upgrade to General Class. Answers on 'Last Page Calendar'.

This month we finish up : **Subelement G5: Electrical Principles**

G5C09
What is the capacitance of three 100 microfarad capacitors connected in series?
A. 0.30 microfarads
B. 0.33 microfarads
C. 33.3 microfarads
D. 300 microfarads

G5C10
What is the inductance of three 10 millihenry inductors connected in parallel?
A. 0.30 henrys
B. 3.3 henrys
C. 3.3 millihenrys
D. 30 millihenrys

G5C11
What is the inductance of a 20 millihenry inductor connected in series with a 50 millihenry inductor?
A. 0.07 millihenrys
B. 14.3 millihenrys
C. 70 millihenrys
D. 1000 millihenrys

G5C12
What is the capacitance of a 20 microfarad capacitor connected in series with a 50 microfarad capacitor?
A. 0.07 microfarads
B. 14.3 microfarads
C. 70 microfarads
D. 1000 microfarads

G5C13
Which of the following components should be added to a capacitor to increase the capacitance?
A. An inductor in series
B. A resistor in series
C. A capacitor in parallel
D. A capacitor in series

General Class Quiz - Continued on page 29

General Class Quiz - Continued from page 28

G5C14
Which of the following components should be added to an inductor to increase the inductance?
A. A capacitor in series
B. A resistor in parallel
C. An inductor in parallel
D. An inductor in series

G5C15
What is the total resistance of a 10 ohm, a 20 ohm, and a 50 ohm resistor connected in parallel?
A. 5.9 ohms
B. 0.17 ohms
C. 10000 ohms
D. 80 ohms

G5C16
Why is the conductor of the primary winding of many voltage step up transformers larger in diameter than the conductor of the secondary winding?
A. To improve the coupling between the primary and secondary
B. To accommodate the higher current of the primary
C. To prevent parasitic oscillations due to resistive losses in the primary
D. To insure that the volume of the primary winding is equal to the volume of the secondary winding

G5C17
What is the value in nanofarads (nF) of a 22,000 pF capacitor?
A. 0.22 nF
B. 2.2 nF
C. 22 nF
D. 220 nF

G5C18
What is the value in microfarads of a 4700 nanofarad (nF) capacitor?
A. 47 µF
B. 0.47 µF
C. 47,000 µF
D. 4.7 µF

The W1UL Ham Cram Website
www.ham-cram.com

ARRL Ham Radio License Exam Practice Website
www.arrlexamreview.appspot.com

Regional Yaesu System Fusion Repeaters

County, State	Location	Callsign/Club	Frequency	Off-Set	PL Tone
Atlantic County, NJ	West Atlantic City	W2HRW/SPARC	443.250 MHz	Plus	146.2 Hz
Atlantic County, NJ	Atlantic City	KC2TGB/SCERN	444.65625 MHz	Plus	Open
Burlington County, NJ	Medford	K2AA/SJRA	145.290 MHz	Minus	91.5 Hz
Camden County, NJ	Blue Anchor	KB2AYS	445.125 MHz	Minus	91.5 Hz
Camden County, NJ	Cherry Hill	NJ2CH	145.370 MHz	Minus	91.5 Hz
Camden County, NJ	Cherry Hill	K3RJC/HARC	444.900 MHz	Plus	131.8 Hz
Camden County, NJ	Cherry Hill	KB2UMJ	446.375 MHz	Minus	91.5 Hz
Camden County, NJ	Gloucester City	NJ2GC	447.775 MHz	Minus	146.2 Hz
Camden County, NJ	Lindenwold	K2EOC/SCERN	440.24375 MHz	Plus	Open
Camden County, NJ	Runnemede	WA2WUN	147.225 MHz	Plus	192.8 Hz
Cape May County, NJ	Wildwood	WA2WUN	146.670 MHz	Minus	167.9 Hz
Cumberland County, NJ	Rosenhayn	KC2TXB/SCERN	445.31875 MHz	Minus	Open
Cumberland County, NJ	Millville	K2MFW/KB2OLT	447.875 MHz	Minus	88.5 Hz
Gloucester County, NJ	Glassboro	KC2TXX/SCERN	440.10625 MHz	Plus	Open
Ocean County, NJ	Manchester	WA2RES/OCARES	145.170 MHz	Minus	131.8 Hz
Ocean County, NJ	Toms River	NJ2AR/JSARS	448.625 MHz	Minus	141.3 Hz
Salem County, NJ	Pennsville	N2KEJ/SCRA	146.625 MHz	Minus	131.8 Hz
Salem County, NJ	Pilesgrove	NJ2SC/SCERN	445.03125 MHz	Minus	Open
Chester County, PA	Jennersville	N3SLC/SLRC	145.250 MHz	Minus	114.8 Hz
Chester County, PA	Paoli	WB3JOE/MARC	445.675 MHz	Minus	131.8 Hz
Chester County, PA	Valley Forge	W3PHL/PARA	443.900 MHz	Plus	131.8 Hz
Montgomery County, PA	Horsham	K3JJO/DRC	147.165 MHz	Plus	162.2 Hz
Montgomery County, PA	Wyndmoor	K3PDR/PDRA	447.475 MHz	Minus	Open
Philadelphia County, PA	Philadelphia	WM3PEN/HARC	146.685 MHz	Minus	146.2 Hz
Philadelphia County, PA	Roxborough	W3QV/Phil-Mont	444.800 MHz	Plus	186.2 Hz
Kent County, DE	Dover	KC3ARC/KCARC	146.970 MHz	Minus	77.0 Hz
Kent County, DE	Woodside	KC3ARC/KCARC	146.910 MHz	Minus	77.0 Hz
New Castle County, DE	Newark	W3DRA/DRA	146.700 MHz	Minus	131.8 Hz
New Castle County, DE	Newark	W3DRA/DRA	449.025 MHz	Minus	131.8 Hz
New Castle County, DE	Wilmington	WA3UYJ	146.955 MHz	Minus	131.8 Hz
Sussex County, DE	Bridgeville	W3TBG/NARC	145.210 MHz	Minus	Open
Sussex County, DE	Lewes	W4ALT	443.550 MHz	Plus	156.7 Hz
Sussex County, DE	Millsboro	WS3ARA/SARA	449.825 MHz	Minus	156.7 Hz
Sussex County, DE	Seaford	N3KNT	146.715 MHz	Minus	Open
Sussex County, DE	Selbyville	WS3ARA/SARA	147.015 MHz	Plus	156.7 Hz

**New entry or update as of this issue.*

November Birthdays

Congratulations to our members who are celebrating their birthday this month

Paul Agostinelli Jr KC2QPM
Fr. Brian Burgess KD4UTL
Dale Christman KD2NOC
Ted Coyle AA4AZ
Robert Durham W2RAD
Robert Fields KC6AOH
Robert Harrison WA3KOL
Robert Keogh KD2NEC
Ernest Kraus KD2EAV
Chuck Lanard KD2EIB
Howard Marder WA2IBZ
Ray Martin W2RM (President 1979)
Tony Otlowski W2WCC
Cory Sickles WA3UVV (President 1993)

In Memoriam
November Birthdays

Silent Keys:
Hank Basch N2DJN
Peter Butler WB2B
Glenn Farnsworth K2EHM
John Fisher Jr K2JF (President 1988)
Woody Frantz Sr K4HKU (K2AQL) (President 1960)
Ernest Garside WA2TDI
Russ Glans N2ASV (President 1983)
George Hankins N2CFW
Frank King WA2WGA
Eleanor Mattison N2JXS
James McDonald Sr N2AIV

Crosstalk Submissions

This is your Club Newsletter. Make use of it.

If you have stories or photos of your hobby that you would like to share with the Club, please do so!

We will keep covering all of the GCARC events, but it is also nice to get those personal perspectives to include in every issue. Connecting through experiences is what makes the Gloucester County Amateur Radio Club a *REAL* Club.

All submissions, queries, comments and editorials should be addressed to Jeffrey Garth, WB2ZBN at jeff <*dot*> garth <*at*> comcast <*dot*> net.

Submission deadline for the December 2018 issue: Tuesday, November 20, 2018

Club Website www.w2mmd.org
Club E-Mail Reflector: GCARC <*at*> Mailman <*dot*> QTH <*dot*> Net

November Contest Calendar

For more information on the contests, please go to the WA7BNM Contest Calendar website: www.hornucopia.com/contestcal

November 2018	
NRAU 10m Activity Contest	1800Z-1900Z, Nov 1 (CW) and 1900Z-2000Z, Nov 1 (SSB) and 2000Z-2100Z, Nov 1 (FM) and 2100Z-2200Z, Nov 1 (Dig)
SKCC Sprint Europe	2000Z-2200Z, Nov 1
NCCC RTTY Sprint	0145Z-0215Z, Nov 2
NCCC Sprint	0230Z-0300Z, Nov 2
Jakarta RTTY Contest	0000Z-2359Z, Nov 3
IPARC Contest, CW	0600Z-1000Z, Nov 3 and 1400Z-1800Z, Nov 3
Ukrainian DX Contest	1200Z, Nov 3 to 1200Z, Nov 4
ARRL Sweepstakes Contest, CW	2100Z, Nov 3 to 0300Z, Nov 5
IPARC Contest, SSB	0600Z-1000Z, Nov 4 and 1400Z-1800Z, Nov 4
EANET Sprint	0800Z-1200Z, Nov 4
High Speed Club CW Contest	0900Z-1100Z, Nov 4 and 1500Z-1700Z, Nov 4
ARS Spartan Sprint	0200Z-0400Z, Nov 6
Phone Fray	0230Z-0300Z, Nov 7
CWops Mini-CWT Test	1300Z-1400Z, Nov 7 and 1900Z-2000Z, Nov 7 and 0300Z-0400Z, Nov 8
UKEICC 80m Contest	2000Z-2100Z, Nov 7
NCCC RTTY Sprint	0145Z-0215Z, Nov 9
NCCC Sprint	0230Z-0300Z, Nov 9
WAE DX Contest, RTTY	0000Z, Nov 10 to 2359Z, Nov 11
PODXS 070 Club Triple Play Low Band Sprint	0000Z, Nov 10 to 2359Z, Nov 12
10-10 Int. Fall Contest, Digital	0001Z, Nov 10 to 2359Z, Nov 11
JIDX Phone Contest	0700Z, Nov 10 to 1300Z, Nov 11
SARL VHF/UHF Analogue Contest	1000Z, Nov 10 to 1000Z, Nov 11
OK/OM DX Contest, CW	1200Z, Nov 10 to 1200Z, Nov 11
SKCC Weekend Sprintathon	1200Z, Nov 10 to 2400Z, Nov 11
CQ-WE Contest	1900Z-2300Z, Nov 10 (CW/Digital) and 0100Z-0500Z, Nov 11 (Phone) and 1900Z-2300Z, Nov 11 (Phone) and 0100Z-0500Z, Nov 12 (CW/Digital)
AWA Bruce Kelley 1929 QSO Party	2300Z, Nov 10 to 2300Z, Nov 11 and 2300Z, Nov 17 to 2300Z, Nov 18
4 States QRP Group Second Sunday Sprint	0100Z-0300Z, Nov 12
RSGB 80m Autumn Series, Data	2000Z-2130Z, Nov 12

November Contest Calendar - Continued on page 33

November Contest Calendar

For more information on the contests, please go to the WA7BNM Contest Calendar website: www.hornucopia.com/contestcal

November Contest Calendar - Continued from page 32

Phone Fray	0230Z-0300Z, Nov 14
CWops Mini-CWT Test	1300Z-1400Z, Nov 14 and 1900Z-2000Z, Nov 14 and 0300Z-0400Z, Nov 15
NCCC RTTY Sprint	0145Z-0215Z, Nov 16
NCCC Sprint	0230Z-0300Z, Nov 16
YO International PSK31 Contest	1600Z-2200Z, Nov 16
SARL Field Day Contest	1000Z, Nov 17 to 1000Z, Nov 18
LZ DX Contest	1200Z, Nov 17 to 1200Z, Nov 18
All Austrian 160-Meter Contest	1600Z, Nov 17 to 0700Z, Nov 18
REF 160-Meter Contest	1700Z, Nov 17 to 0100Z, Nov 18
Feld Hell Sprint	1900Z-2059Z, Nov 17
RSGB 2nd 1.8 MHz Contest, CW	1900Z-2300Z, Nov 17
ARRL Sweepstakes Contest, SSB	2100Z, Nov 17 to 0300Z, Nov 19
Homebrew and Oldtime Equipment Party	1300-1500Z, Nov 18 (40m) and 1500-1700Z, Nov 18 (80m)
Run for the Bacon QRP Contest	0200Z-0400Z, Nov 19
Phone Fray	0230Z-0300Z, Nov 21
CWops Mini-CWT Test	1300Z-1400Z, Nov 21 and 1900Z-2000Z, Nov 21 and 0300Z-0400Z, Nov 22
RSGB 80m Autumn Series, SSB	2000Z-2130Z, Nov 21
NAQCC CW Sprint	0130Z-0330Z, Nov 22
NCCC RTTY Sprint	0145Z-0215Z, Nov 23
NCCC Sprint	0230Z-0300Z, Nov 23
CQ Worldwide DX Contest, CW	0000Z, Nov 24 to 2400Z, Nov 25
ARRL EME Contest	0000Z, Nov 24 to 2359Z, Nov 25
SKCC Sprint	0000Z-0200Z, Nov 28
Phone Fray	0230Z-0300Z, Nov 28
CWops Mini-CWT Test	1300Z-1400Z, Nov 28 and 1900Z-2000Z, Nov 28 and 0300Z-0400Z, Nov 29
UKEICC 80m Contest	2000Z-2100Z, Nov 28
RSGB 80m Autumn Series, CW	2000Z-2130Z, Nov 29
NCCC RTTY Sprint	0145Z-0215Z, Nov 30
NCCC Sprint	0230Z-0300Z, Nov 30
ARRL 160-Meter Contest	2200Z, Nov 30 to 1600Z, Dec 2

w2mmd.org

www.facebook.com/W2MMD

twitter.com/w2mmd_gcarc

Facebook Page

Club Committees

Standing Committees	Committee Chairs
Membership and Publicity	**Bob Fields, KC6AOH**
Hamfest	**Sheldon Parker, K2MEN and Bill Price, NJ2S**
Repeater	**John Zaruba Jr, K2ZA**
Hospitality	**Jeffrey Garth, WB2ZBN**
W2MMD Clubhouse Site	**Al Arrison, KB2AYU**
Field Day	**Al Arrison, KB2AYU**
Nominations	**Bruce Canino, KD2LBU**
Health, Welfare, & Silent Keys	**Bill Price, NJ2S**
Budget	**Al Arrison, KB2AYU**
Constitution and By-Laws	**Ron Block, NR2B**
Membership Badges	**Chuck Colabrese, WA2TML**

Activity Committees	Committee Chairs
ARES/RACES Emergency Communications	***Open position***
Club Publications	**Jeffrey Garth, WB2ZBN**
License Testing/VEC Liaison	**Gary Reed, N2QEE**
Programs	**Jim Clark, KA2OSV**
Membership Roster Database	**Jeffrey Garth, WB2ZBN**
Club Historian	**Jeffrey Garth, WB2ZBN**
GCARC Family Picnic	**Laurie Love, KD2EYW**
Foxhunts	**Jim Wright, N2GXJ**
W2MMD License Trustee	**Darrell Neron, AB2E**
Contests and Nets	**Jim Clark, KA2OSV**
Holiday Dinner Party	**Jennifer Robinson, KD2EYR**
W2MMD Special Event Station	**Jim Clark, KA2OSV & Tony Starr, WA2FZB**

GCARC <*at*> Mailman <*dot*> QTH <*dot*> Net e-mail reflector guidelines

1. **No attachments** (e.g. pictures, files) are allowed on the reflector.
2. If you have Club-related pictures that you would like to share, you can send them to the webmaster, he will put them on the website and he will send out a general e-mail to all the members.
3. Otherwise, the pictures will have to be sent to the members' addresses.
4. URLs/Hyperlinks are acceptable on the reflector.
5. Do not send any messages with e-mail addresses in the **BCC** (**Blind Carbon Copy**) field. The message will be rejected. Use only the **To:** or **CC:** fields.
6. Members are subscribed to the reflector using the member's e-mail address from the roster database. You must use that address when sending an e-mail via the reflector.
7. If you use another address on the reflector, the message will get rejected or "*bounced*", because the reflector does not recognize that address.
8. Whenever a message sent to reflector is rejected or *"bounced"* for various reasons, the administrator has to log-in to the Mailman.QTH website and approve the message. If the admin recognizes the address as belonging to a Club member, the message is accepted and passed on to the reflector.

FYI...If you use Comcast e-mail, you are limited to 100 addresses per message.
For more information about the e-mail reflector, goto : **www.mailman.qth.net**

The W2MMD Repeaters

Output: 147.180 MHz
Input: 147.780 MHz
Offset: +600 kHz - PL: 131.8 Hz
(Conventional FM plus C4FM Capability)

On-The-Air - Analog Only
Output: 442.100 MHz
Input: 447.100 MHz
Offset: +5 MHz - PL: 131.8 Hz

Temporarily Off-The-Air
Output: 1284.400 MHz
Input: 1272.400 MHz
Offset: -12.0 MHz
PL Tone: None

The above 3 repeaters are all
located in Pitman, NJ
GPS: 39.728481°, -75.131088°

New BridgeCom Repeater is on-the-air
Output: 224.660 MHz
Input: 223.060 MHz
Offset: -1.6 MHz
PL Tone: 131.8 Hz
Location: Sewell, NJ
GPS: 39.746738°, -75.077094°

Meeting Calendar

General Membership Meeting

Wednesday, November 7, 2018 @ 1930 Hours
Pfeiffer Community Center
301 Blue Bell Road
(Main Street and Blue Bell Road)
Williamstown, NJ

Board of Directors Meeting

Wednesday, November 21, 2018 @ 1900 Hours
W2MMD Clubhouse
Gloucester County 4-H Fairgrounds
235 Bridgeton Pike (Rt 77), Mullica Hill, NJ

November 7, 2018

General Membership Meeting

Skype Meeting With:

Gordon West, WB6NOA

SKYWARN™ Net
Sunday @ 1945: 147.180 MHz

Gloucester County ARES/RACES Net
Sunday @ 2000: 147.180 MHz

10 Meter Rag Chew Net
Every Tuesday @ 2000 Hours
Check-in on 28.465 MHz or 28.475 MHz

10 Meter Swap Meet
2nd Saturday of the Month @ 2000 Hours
Check-in on 28.465 MHz or 28.475 MHz

2 Meter Rag Chew Net
Every Thursday @ 2000 Hours
Check-in on 147.180 MHz + PL 131.8 Hz

** Badges **

Need a new or replacement badge
Contact "The BadgeMan"

Chuck Colabrese, WA2TML
colabrese <*at*> comcast <*dot*> net

Question Pool Answers : G5C09:C; G5C10:C; G5C11:C; G5C12:B; G5C13:C; G5C14:D; G5C15:A; G5C16:B; G5C17:C; G5C18:D